Improving Our Communities with Natural Drainage Systems

Seattle Public Utilities (SPU) is partnering with Seattle Department of Transportation (SDOT) on a project to improve creek water quality, reduce drainage issues, and deliver multiple community benefits to your neighborhood.

PROJECT BACKGROUND

More than 12 million pounds of pollution are carried into our water bodies by stormwater runoff every year. Water that falls on the roofs, streets, and parking lots in your neighborhood eventually makes its way into Pipers Creek, which flows into Puget Sound.

To address water quality in Pipers Creek and Puget Sound, SPU is working to minimize pollution at its source by installing natural drainage systems (NDS). NDS are made up of a series of cells, or shallow depressions, along a block designed to capture and slow stormwater, and filter pollutants before they can reach our waterways.

This project is part of the Plan to Protect Seattle's Waterways, an initiative that aims to improve water quality, manage stormwater flows, and improve your neighborhood by increasing landscape diversity, calming traffic, and providing better pedestrian safety and community mobility. SPU is collaborating with SDOT to build pedestrian improvements with these potential NDS sites.

BENEFITS TO NDS PROJECTS INCLUDE:

- Drainage improvements (above and below ground)
- Landscaping and street tree improvements
- Pedestrian improvements
- Healthier creek ecosystems

WHAT ARE NATURAL DRAINAGE SYSTEMS?

Natural drainage systems are shallow depressions built in the roadway shoulder (the space between the street edge and property line). They are filled with a special soil and deep-rooted plants to temporarily hold and filter polluted stormwater from streets.

HOW DO NATURAL DRAINAGE SYSTEMS WORK?

- 1 During rain events, stormwater from hard surfaces in your neighborhood drains to the natural drainage system. A layer of plants and soil filters the pollutants.
- 2 The filtered stormwater seeps into a drainage pipe connecting to a downstream drainage system.
- **3** The system is designed to pond water up to six inches during large rain events. All ponded water will drain down into the formal drainage system within 24 hours after a rain event.



PROJECT AREA MAP



SPU is going through several stages of evaluating blocks as candidates for NDS sites. We have already completed one stage of the process and narrowed down our selection to the areas highlighted in the map to the left. This initial selection was done by taking community input into account along with a technical review. We are now looking for public input on the selected blocks, additional improvements, and potential impacts.

PROJECT TIMELINE

LATE	EARLY	EARLY	END OF
2022	2023	2024	2025
Early Design Phase: identify several locations for NDS installation	Refine locations based on studies and community feedback	Finalize Design	Finish construction phase

JOIN US AT A VIRTUAL PUBLIC MEETING!

Join us on **Tuesday, October 4, 2022 from 6:30pm – 7:30pm** for a virtual public meeting. Learn more about the potential sites for natural drainage and accompanying sidewalks. Share your thoughts on the NDS sites, additional improvements, and potential impacts.



Register: scan the QR code

Learn more about the project: seattle.gov/utilities/PipersNDS

For interpretation services please call (206) 561-5801

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Para sa serbisyo ng tagapagpaliwanag, tumawag sa (206) 561-5801

Về dịch vụ phiên dịch xin gọi (206) 561-5801

Questions? Contact Seattle Public Utilities

Rex Davis, SPU Drainage and Wastewater Representative | rex.davis@seattle.gov | (206) 561-5801 Learn more and sign up for project updates at: seattle.gov/utilities/pipersnds

